### Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

### STATEMENT OF BASIS

Waste Management of Louisiana, LLC
Reliable Production Service, Inc. - Reliable Landfill
Livonia, Pointe Coupee Parish, Louisiana
Agency Interest Number: 25491
Activity Number: PER20080002
Proposed Permit Number: 2260-00075-V1

### I. APPLICANT

Company:

Reliable Production Service Inc - Reliable Landfill PO Box 576 Livonia, Louisiana 70755

Facility:

Waste Management of Louisiana LLC
Hwy 190
Livonia, Pointe Coupee Parish, Louisiana
30.5417 latitude, -90.087758longitude, Coordinate Method: Lat.\Long. - DMS

#### II. FACILITY AND CURRENT PERMIT STATUS

Reliable Landfill is a municipal solid waste disposal facility. Reliable Landfill receives a variety of non-hazardous solid waste (mostly municipal trash) that is disposed of by landfilling. The landfill is supported by a variety of operations and maintenance-related activities, including operation and maintenance of mobile equipment and other non-mobile equipment powered by internal combustion engines, handling of leachate removed from the landfill prior to disposal, and storage of motor fuels and lubricants.

### III. PROPOSED PROJECT/PERMIT INFORMATION

### **Application**

A permit application and Emission Inventory Questionnaire were submitted by Reliable Landfill, LLC on December 4, 2008 requesting a Part 70 operating permit. Additional information dated September 25, 2009 was also received.

### **Project**

This permit renewal/modification incorporates the following changes:

- Creation of emissions caps for diesel and gasoline driven engine for operational flexibility;
- Updating of emission rates due to changes in emission factors;
- Updating of inventory information as necessary;
- Updating of waste projections for the term of the permit; and,
- Revising of the list of small engines and other miscellaneous sources.

### **Proposed Permit**

Permit 2260-00075-V1 will be the renewal/modification of Part 70 operating permit 2260-00075-V1 for the Reliable Landfill.

### **Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
$PM_{10}$	6.21	8.02	+1.81
SO <sub>2</sub>	2.05	2.55	+0.50
$NO_X$	30.43	38.88	+8.45
CO	22.85	11.31	-11.54
VOC	62.21	23.42	-38.79

LAC 33:III Chapter	51	Toxic Air Pollutants (	TAPs):

Pollutant	Before	After	Change
1,1,1-Trichloroethane	0.03	0.04	+0.01
1,1,2,2-Tetrachloroethane	0.08	0.11	+0.03
1,1-Dichloroethane	0.10	<b>-</b> ,	-0.10
1,2-Dichloroethane	0.02	0.024	+0.004
1,2-Dichloropropane	0.01	0.01	0
1,3-Butadiene	-	0.006	+0.006
Acetaldehyde	-	0.01	+0.01
Acrolein	-	0.001	+0.001
Acrylonitrile	0.14	0.201	+0.061
Benzene	0.35	0.53	+0.18
Carbon disulfide	0.02	0.03	+0.01
Carbon Tetrachloride	<0.01	-	-0.01
Carbonyl sulfide	0.01	0.02	+0.01

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LAC 33:III Chapter 51 Toxic	Air Pollutants (TA	<u>Ps):</u>	
Pollutant	Before	After	Change
Chlorobenzene	0.01	0.017	+0.007
Chloroethane	0.03	0.05	+0.02
Chloroform	< 0.01	0.01	0
Dichlorobenzene	0.01	-	-0.01
Dichloromethane	0.49	0.73	+0.24
Ethyl benzene	0.20	0.29	+0.09
Formaldehyde	-	0.02	+0.02
Hydrogen sulfide	0.48	0.72	+0.24
Mercury	< 0.01	-	-0.01
Methyl chloride	0.03	0.05	+0.02
Methyl ethyl ketone	0.21	0.32	+0.11
Methyl isobutyl ketone	0.08	0.11	+0.03
Tetrachloroethylene	0.25	0.37	+0.12
Toluene	6.06	9.09	+3.03
Total Reduced Sulfur	0.60	-	-0.60
Trans-1,2-Dichloroethylene	0.11	-	-0.11
Trichloroethylene	0.25	0.22	-0.03
Vinyl chloride	0.18	0.27	+0.09
Vinylidene chloride	0.01	0.01	0
Xylene (mixed isomers)	0.51	0.78	+0.27
n-Hexane	0.23	0.34	+0.11

### IV REGULATORY ANALYSIS

Total

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

10.53

14.379

+3.849

# Applicability and Exemptions of Selected Subject Items

XI. Table 2.	XI. Table 2. Explanation for Exemption Status or Non-App	Status or Non-Applicability of a Source
ID No:	Requirement	Notes
	40 CFR 63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	DOES NOT APPLY. The facility has estimated uncontrolled emissions less than 50 megagrams per year (Mg/yr) NMOC.
	40 CFR 68 - Chemical Accident Prevention Provision	DOES NOT APPLY. The facility does not have more than the threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115.
Reliable Landfill, LLC	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.Chapter 51]	EXEMPT. Facility is not a major source of TAPs emitting less than 10 tons per year of any toxic air pollutant listed in LAC 33:III.5112, Table 51.1 or 25 tons per year or more of any combination of toxic air pollutants listed in LAC 33:III.5112, Table 51.1.
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.5901]	DOES NOT APPLY. The facility does not process more than the threshold quantity of a regulated pollutant.
ARE01 – Landfill Gas Emissions	40 CFR 63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	DOES NOT APPLY. The facility has estimated uncontrolled emissions less than 50 megagrams per year (Mg/yr) NMOC.
GRP02 - M-3 Gas -IC Engines - Gas GRP03 - M-3 Diesel -IC Engines- Diesel	Emission Standards for Sulfur Dioxide [LAC 33:III.Chapter 15]	DOES NOT APPLY. The single point sources emit less than 5 tons per year of sulfur dioxide into the atmosphere.

GRP02 - M-3 Gas –IC Engines – Gas	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [40 CFR 60 Subpart JJJJ]	DOES NOT APPLY. Engines are Non-road Engines per 40 CFR 1068.30. These engines will not remain at a single site at a building, structure, facility or installation for more than 12 consecutive months. Any engine (or engines) that replaces an engine at a location and that is intended to perform that or a similar function as the engine replaced will be included in calculating the consecutive time period.
	Control of Emissions of Nitrogen Oxides [LAC 33:III.Chapter 22]	EXEMPT. All engines are less than 150 Hp.
GRP03 - M-3 Diesel –IC Engines- Diesel	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60 Subpart IIII]	DOES NOT APPLY. Engines are Non-road Engines per 40 CFR 1068.30. These engines will not remain at a single site at a building, structure, facility or installation for more than 12 consecutive months. Any engine (or engines) that replaces an engine at a location and that is intended to perform that or a similar function as the engine replaced will be included in calculating the consecutive time period.
	Control of Emissions of Nitrogen Oxides [LAC 33:III.Chapter 22]	EXEMPT. All engines are less than 150 Hp.

### Prevention of Significant Deterioration/Nonattainment Review

PSD/non-attainment review was not required.

### Streamlined Equipment Leak Monitoring Program

Unit or	Program Being Streamlined	Stream	Overall Most
Plant Site		Applicability	Stringent Program
Reliable Landfill	None		

### **MACT Requirements**

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Therefore, MACT analysis was not required.

### **Air Quality Analysis**

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

### **General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

### **Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

### V. PERMIT SHIELD

There is no permit shield requested in this permit action according to LAC 33:III.507.I.

### VI. PERIODIC MONITORING

Annual monitoring of the nonmethane organic compounds emission rate will be required to determine applicability of 40 CFR 60. Subpart WWW—Standards of Performance for Municipal Solid Waste Landfills as specified by 40 CFR.752(b)(1)(ii).

Federal regulation 40 CFR 64 – Compliance Assurance Monitoring is not applicable to this facility.

#### VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide  $(H_2S)$  – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides  $(NO_X)$  - Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane  $(C_1H_6)$ , Ethane  $(C_2H_6)$ , Carbon Disulfide  $(CS_2)$ 

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) - A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air

Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.